

this assumption is correct, it would be interesting to investigate the extent to which hypertension contributes to atrophy, increases the likelihood of conversion from mild cognitive impairment to full-blown AD, or complicates the course of established AD. In line with this assumption, it is important that some observational studies have reported that use of antihypertensives decreases the risk of AD (Skoog and Gustafson, 2006). If hypertension is proven to be a significant predictor of hippocampal atrophy, then both primary and secondary prevention of AD could be achieved with anti-hypertensive drugs. A large comparative study involving AD patients with hypertension and hippocampal atrophy and those with no atrophy needs to be undertaken to establish this association further.

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Physical assault by aggressive older adults

Aggressive and violent behavior is a problem throughout healthcare services (Behar *et al.*, 2008). The incidence of such acts is known to be over two and half times greater in mental health settings than in general hospital environments (National Audit Office, 2003). All types of aggression may have negative physical and psychological consequences for the victim, and therefore none ought not to be overlooked. However, one particularly serious feature is physical assault, which may result in a physical injury to the victim, although reported levels are relatively low (Stubbs *et al.*, 2009). Physical assault may also affect the psychological, emotional and spiritual well-being of health staff and a minority may go on to develop post-traumatic stress type symptoms (Needham *et al.*, 2005). Indeed, these symptoms may last longer than the original physical injury itself (Needham *et al.*, 2005).

Those working outside older adult psychiatry may underestimate the challenging nature of this population. This is despite recent confirmation that such patients are very capable of displaying high frequency and severe levels of aggression (Stewart *et al.*, 2008). Little accurate information is available in relation to the nature and outcome of assault among these patients and their care staff, and it is therefore difficult to develop

aggression training programs that reflect the relative risks for those caring for older adult psychiatric inpatients.

The Townsend Division of St Andrews Healthcare in the U.K. has an international reputation as a leading psychiatric service for older adults with a history of challenging and offending behaviors. There are over 90 beds across five wards. Staff routinely record all incidents of injurious assault on official hospital accident and incident forms. A retrospective audit was conducted of these forms between March and August 2008 to ascertain official levels of assault and any subsequent injuries to healthcare staff.

In this six-month period, there were 179 recorded assaults (monthly mean = 30, range 8–38). Of these, 102 (57%) resulted in physical injury to staff and 21 (12%) to patients. Four assaults (2%) resulted in injuries to a member of staff which prevented them from remaining on duty. The sites of these injurious and non-injurious assaults varied greatly (see Table 1), though arm injuries to staff were reported to be most common (n = 41; 23%). Arms were also the commonest target in assaults that did not cause injury (n = 14; 18%), probably because staff use their arms to block oncoming assaults and to apply physical restraint techniques. Head, face and neck injuries were also common sites of assault both for staff injuries (n = 27; 26%) and patient injuries (n = 12; 57%). Pinching and/or scratching the arms of healthcare staff (37%) was by far the most common type of injurious assault, with

Table 1. Sites of injurious and non-injurious assault by older adults against staff and patients

BODY PART	INJURIOUS ASSAULT ON STAFF (N)	NON-INJURIOUS ASSAULT ON STAFF (N)	INJURIOUS ASSAULT ON PATIENT (N)	NON-INJURIOUS ASSAULT ON PATIENT (N)
Leg	5	5	2	2
Arm	41	14	2	1
Head	6	4	5	1
Neck	2	4	2	3
Mouth	2	0	1	1
Chest	0	4	1	4
Back	2	1	0	2
Stomach	7	15	0	3
Face	16	10	0	6
Nose	1	2	4	0
Various	9	1	3	0
Not available	11	17	2	28

Table 2. Type and site of injurious assaults (n = 102)

TYPE OF ASSAULT AND SITE OF INJURY	NUMBER (N)
Pinch / scratch arm	38
Punch face/ head	12
Kick in leg	9
Kick face	6
Punch chest	3
Grab arm	7
Bite finger	2
Punch stomach	3
Hit arm	1
Throw object at staff	3
Scratch face	2
Strangle	2
Head butt head	3
Kick in arm	1
Pull hair	2
Multiple	3
Unclear	6

punches to the face/ head (12%) coming second (Table 2).

This letter reports high levels of injuries from physical assaults. It is probable that there is an over-representation of injurious assaults because staff will tend to record those assaults causing injury and overlook non-injurious assaults. It is worth pointing out that no attempt has been made to classify the severity of the injuries reported here as “major” or “minor” as some authors have done. Very few of the assaults (2%) resulted in injuries that caused the member of staff to take time off duty. However, as reported earlier, the psychological

effects of experiencing assault can be more disabling and longer lasting and this letter does not account for such effects. However, it is hoped that this information on the sites of assaults may help in the development of “aggression management” courses for those working within older adult psychiatric services.

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